

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 29-36 are pending in this application. Claims 29 and 33 are independent and hereby amended. No new matter has been introduced by this amendment. Support for this amendment is provided throughout the specification, specifically at paragraphs [0069]-[0072] and Fig. 3 of Applicants' corresponding published application. It is submitted that these claims, as originally presented, were in full compliance with the requirements 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which the Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 29, 30, 33 and 34 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 6,504,577 B1 to Voltz et al (hereinafter, merely "Voltz") in view of U.S. Patent No. 5,497,244 to Chargin, Jr. et al (hereinafter, merely "Chargin, Jr.").

Claims 31, 32, 35 and 36 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Voltz in view of Chargin, Jr., and further in view of U.S. Patent No. 6,002,835 to Watanabe (hereinafter, merely "Watanabe").

III. RESPONSE TO REJECTIONS

Claim 29 recites, *inter alia*:

"...acquires a first reproduction output video signal comprising a sequence of frames, each frame comprising an even field and an odd field, each odd field of the first output signal being same as the odd field of the input signal that synchronizes with the corresponding odd field of the first output signal, and the even field in the first output signal being generated by copying data of the odd field of the same frame in the first output signal, and

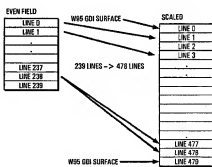
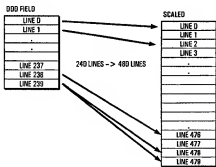
acquires a second reproduction output video signal comprising a sequence of frames, each frame comprising an even field and an odd field, each even field of the second output signal being same as the even field of the input signal that synchronizes with the corresponding even field of the second output signal, and the odd field in the second output signal being generated by copying data of the even field of the same frame in the second output signal." (Emphasis Added)

As understood by Applicants, Chargin, Jr. relates to a television storage system for editing and special effects equipment in which live video input material is recorded and converted into two parallel streams of real time live video with the input video recorded as compressed segments independently accessible on multiple synchronous disk drives.

Applicants respectfully submit that Applicant submits that neither Voltz nor Chargin, Jr., taken alone or in combination, that would teach or suggest the above-identified features of claim 29. Specifically, neither of the references used as a basis for rejection describes

each odd field of the first output signal being same as the odd field of the input signal that synchronizes with the corresponding odd field of the first output signal, and each even field of the second output signal being same as the even field of the input signal that synchronizes with the corresponding even field of the second output signal, as recited in claim 29.

Specifically, the Office Action (see page 2) asserts that Voltz describes acquiring a signal by copying data of the odd/even field to the even/odd field of the same frame, and refers to Voltz, Fig. 6A-6B and col.13, lines 27-52, col. 9, lines 11-30 and lines 41-50. Voltz, col. 10, lines 40-47 and col. 11, lines 13-20 recite features described in relation to Fig. 6A-6B, and are reproduced as follow:



...As shown in FIG. 6A, line 0 of the odd field is mapped directly to Line 0 of the scaled field. The graphics controller then interpolates Line 1 of the scaled field, based on the values of line 0 and line 1 of the odd field. Then, line 2 of the scaled field is mapped from line 1 of the odd field. In this manner, the larger scaled field is determined from the odd field, without reference to any value of the even field... (Voltz, col. 10, lines 40-47)

...as shown in FIG. 6B, line 0 of the odd field is mapped directly to Line 1 of the scaled field. The graphics controller then interpolates Line 2 of the scaled field, based on the values of line 0 and line 1 of the even field. Then, line 3 of the scaled field is mapped from line 1 of the even field. In this manner, the larger scaled field is determined from the even field, without reference to any value of the odd field... (Voltz, col. 11, lines 13-20)

Thus, Applicants submit that in Voltz, as shown in Fig. 6A, line 0 of the scaled field is mapped from line 0 of the odd field; line 1 of the scaled field is interpolated by the

graphics controller; line 2 of the scaled field is mapped from line 1 of the odd field, *i.e.*, **the scaled field is larger than the odd field, and the lines in the scaled field do not synchronize with the lines in the odd field.** Similarly, as shown in Fig. 6B, line 0 of the scaled field is mapped from line 0 of the even field; line 1 of the scaled field is interpolated by the graphics controller; line 2 of the scaled field is mapped from line 1 of the even field, *i.e.*, **the scaled field is larger than the even field, and the lines in the scaled field do not synchronize with the lines in the even field, either.**

However, in the present invention, paragraphs [0069]-[0072] and Fig. 3 of Applicants' corresponding published application, describe the synchronization of the input and output video signals, and are reproduced as follow:

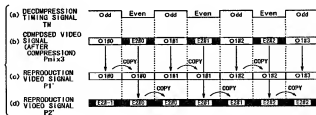
[0069] As shown in FIG. 3(a), the timing generation section 108 outputs the decompression timing signal TM that indicates a field period in synchronization with the decompression output from the decompression section 107.

[0070] The video decomposition section 109 outputs the composed video signal Pmix3 to the interpolation section 111 during a period in which the decompression timing signal TM shows an odd-numbered field. On the other hand, the video decomposition section 109 outputs the composed video signal Pmix3 to the interpolation section 112 during a period in which the decompression timing signal TM shows an even-numbered field.

[0071] Accordingly, the interpolation section 111 is supplied with data O1#0, O1#1, O1#2, and so on corresponding to even-numbered fields of the composed video signal Pmix3. The interpolation section 111 performs interpolation, for example, by copying data of the even-numbered field to generate an odd-numbered field, thus generating the video signal P1' as shown in FIG. 3(c).

[0072] The interpolation section 112 is supplied with data E1#0, E1#1, E1#2, and soon corresponding to odd-numbered fields of the composed video signal Pmix3. The interpolation section 112 performs interpolation, for example, by copying data of the odd-numbered field to generate an even-numbered field, thus generating the video signal P2' as shown in FIG. 3(d).

FIG. 3



Thus, in the present invention, as shown in Fig. 3 (b) and (c), the odd field O1#0 of P1', which is same as the odd field O1#0 of P_{mix3}, synchronizes with the odd field O1#0 of P_{mix3}; similarly, the odd fields O1#1, O1#2 and O1#3 of P1', which are same as the odd fields O1#1, O1#2 and O1#3 of P_{mix3}, respectively, synchronize with the odd fields O1#1, O1#2 and O1#3 of P_{mix3}, respectively. As shown in Fig. 3 (b) and (d), the even field E2#0 of P2', which is same as the even field E2#0 of P_{mix3}, synchronizes with the even field E2#0 of P_{mix3}; similarly, the even fields E2#1 and E2#2 of P2', which are same as the even fields E2#1 and E2#2 of P_{mix3}, respectively, synchronize with the even fields E2#1 and E2#2 of P_{mix3}, respectively.

Thus, nothing has been found in Voltz that would teach each odd field of the first output signal being same as the odd field of the input signal that synchronizes with the corresponding odd field of the first output signal, and each even field of the second output signal being same as the even field of the input signal that synchronizes with the corresponding even field of the second output signal, as recited in claim 29.

Furthermore, this deficiency of Voltz is not cured by the supplemental teaching of Chargin, Jr..

Therefore, Applicants submit that independent claim 29 is patentable.

For reasons similar to those described above with regard to independent claim 29, independent claim 33 is patentable.

IV. DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same

reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Similarly, because Applicants maintain that all claims are allowable for at least the reasons presented hereinabove, in the interests of brevity, this response does not comment on each and every comment made by the Examiner in the Office Action. This should not be taken as acquiescence of the substance of those comments, and Applicants reserve the right to address such comments.

CONCLUSION

In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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